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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Larry C. Olsen et al.

Application No. Not yet assigned

Filed: Herewith

Confirmation No. Not yet assigned

For: THERMOELECTRIC DEVICES AND
APPLICATIONS FOR THE SAME

Examiner: Not yet assigned

Art Unit: Not yet assigned

Attorney Reference No. 23-65037-09

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INFORMATION DISCLOSURE STATEMENT
PURSUANT TO 37 C.F.R. § 1.97(b)(2)

Listed on the accompanying form PTO-1449 and enclosed herewith are several English-language and/or non-English-language documents. Applicants respectfully request that these documents be listed as references cited on the issued patent.

Copies of United States patents and United States published patent applications do not have to be provided to the Patent Office (37 C.F.R. 1.98(a)(2)(ii)). Copies of unpublished U.S. applications do not have to be provided, as long as the application is available on PAIR, as this requirement of 37 C.F.R. § 1.98(a)(2)(iii) has been waived by the United States Patent and Trademark Office pursuant to the Official Gazette Notice on October 19, 2004 (1287 OG 163). Applicants will provide copies of such patents or applications upon request.

Applicants filed this Information Disclosure Statement ("IDS") within three months of the date of entry of the national stage as set forth in § 1.491 in an international application. As a result, no fee should be required to file this IDS. However, if the Patent Office determines that a fee is required for Applicants to file this IDS, please charge any such fees, or credit overpayment, to Deposit Account No. 02-4550.

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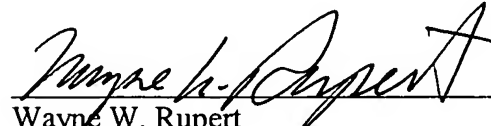
PATENT

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The filing of this IDS shall not be construed to be an admission that the information cited in the statement is, or is considered to be, prior art or otherwise material to patentability as defined in 37 C.F.R. §1.56.

Respectfully submitted,

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**INFORMATION DISCLOSURE STATEMENT
BY APPLICANT**

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Application Number	Not yet assigned
Filing Date	Herewith 05/31/06
First Named Inventor	Larry C. Olsen
Art Unit	Not yet assigned
Examiner Name	Not yet assigned

U.S. PATENT DOCUMENTS

Copies of U.S. Patent documents do not need to be provided, unless requested by the Patent and Trademark Office. For patents, provide the patent number and the issue date. For published U.S. applications, provide the publication number and the publication date. For unpublished pending patent applications, provide the application number and the filing date.

Examiner's Initials*	Cite No. (optional)	Number	Publication Date	Name of Applicant or Patentee
		3,554,815	1/1971	Osborn
		4,036,665	7/1977	Barr et al.
		4,312,402	1/1982	Basiulis
		4,520,305	5/1985	Cauchy
		5,286,304	2/1994	Macris et al.
		6,096,964	8/2000	Ghamaty et al.
		6,096,965	8/2000	Ghamaty et al.
		6,232,543	5/2001	Nagata
		6,288,321	9/2001	Fleurial et al.
		6,372,538	4/2002	Wendt et al.
		6,388,185	5/2002	Fleurial et al.
		6,413,645	7/2002	Graff et al.
		2002/0139123	10/2002	Bell
		2002/0148236	10/2002	Bell
		2004/0231714	11/2004	Stark et al.

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**INFORMATION DISCLOSURE STATEMENT
BY APPLICANT**

Attorney Docket Number	23-65037-09
Application Number	Not yet assigned
Filing Date	Here with 12/28/2001
First Named Inventor	Larry C. Olsen
Art Unit	Not yet assigned
Examiner Name	Not yet assigned

FOREIGN PATENT DOCUMENTS

Examiner's Initials*	Cite No. (optional)	Country	Number	Publication Date	Name of Applicant or Patentee
		DE	297 23 309	3/1997	
		JP	09107129	4/1997	
		JP	09224387	8/1997	
		JP	2003179275	6/2003	
		WIPO	02/23642	3/2002	
		WIPO	02/095707	11/2002	
		WIPO	03/007391	1/2003	
		WIPO	03/015186	2/2003	
		WIPO	04/105143	12/2004	

Examiner's Initials*	Cite No. (optional)	OTHER DOCUMENTS
		Bergstresser, T.R. et al., "Copper on Polyimide Flexible Substrate for Ultra-Thin, High Performance Applications," 4 pages (2000).
		Chen, G., "Thermal conductivity and ballistic-phonon transport in the cross-plane direction of superlattices," <i>Phys. Rev. B</i> , Vol. 57, No. 23, pp. 14958-14973 (June 15, 1998).
		Hicks, L.D. et al., "Effect of quantum-well structures on the thermoelectric figure of merit," <i>Phys. Rev. B</i> , Vol. 47, No. 19, pp. 12727-12731 (May 15, 1993).

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Examiner's Initials*	Cite No. (optional)	OTHER DOCUMENTS
		Kiely, J.H. et al., "Characteristics of Bi _{0.5} Sb _{1.5} Te ₃ /Be ₂ Te _{2.4} Se _{0.6} thin-film thermoelectric devices for power generation," <i>Meas. Sci. Technol.</i> , Vol. 8, pp. 661-665 (June 1997).
		Nolas, G.S. et al., Thermoelectrics, "Basic Principles and New Materials Developments," Springer, Berlin, pp. 111-146 (2001).
		Schaevitz, Samuel B. et al., "A Combustion-Based MEMS Thermoelectric Power Generator," The 11 th International Conference on Solid-State Sensors and Actuators, Munich, Germany, 4 pages (June 10-14, 2001).
		Schmidt, F. et al., "Batterielose Funksensoren, betrieben mit Energie aus der Umgebung," 5 pages (March 2002).
		Stark, Ingo et al., "New Micro Thermoelectric Devices Based on Bismuth Telluride-Type Thin Solid Films," 18 th International Conference on Thermoelectrics, pp. 465-472 (1999).
		Stölzer, M. et al., "Optimisation of p - (Bi _{0.25} Sb _{0.75}) ₂ Te ₃ and n - Bi ₂ (Te _{0.9} Se _{0.1}) ₃ Films for Thermoelectric Thin Film Components," 5 pages.
		Stölzer, M. et al., "Preparation of Highly Effective p-Bi _{2.5} Sb _{1.5} Te ₃ and n-Bi ₂ Te _{2.7} Se _{0.3} Films," 15 th International Conference on Thermoelectrics, pp. 445-449 (1996).
		Stordeur, Matthias et al., "Low Power Thermoelectric Generator - self-sufficient energy supply for micro systems," 16 th International Conference on Thermoelectrics, pp. 575-577 (1997).
		Tritt, T., "Recent Trends in Thermoelectric Materials Research III," Academic Press, London, Vol. 7, pp. 50-55 (2001).
		Venkatasubramanian, Rama et al., "Thin-film thermoelectric devices with high room-temperature figures of merit," <i>Nature</i> , Vol. 413, pp. 597-602 (October 11 2001).
		Vining, Cronin B., "Semiconductors are cool," <i>Nature</i> , Vol. 413, pp. 577-578 (October 11, 2001).
		21 st International Conference on Thermoelectrics, Jet Propulsion Laboratory, California Institute of Technology, Massachusetts Institute of Technology; "Texture formation in extruded rods of (Bi,SB) ₂ (Te,Se) ₃ thermoelectric alloys," Vasilevskiy, E. et al. (August 26-29, 2002).
		Thin-film Superlattice Thermoelectric Technology, www.rti.org , 4 pages (2002).
		Physics of Thin Films: Sputter Deposition (Ohring: Chapter 3, sections 5-6), www.uccs.edu/~tchrste/courses/PHYS549/549lectures/sputter.html , 4 pages (Printed 11/21/02).

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		Physics of Thin Films: Sputter Deposition Techniques (Ohring: Chapter 3, section 7), www.uccs.edu/~tchriste/courses/PHYS549/549lectures/sputtertech.html , 5 pages (Printed 11/21/02).
		Venkatasubramanian, R., "Thin-film Superlattice Thermoelectric Devices for Power Conversion and Cooling," www.its.org/its/ict2002/Abstracts/Rama_Venkatasubramanian.htm (Printed 9/26/03).
		D.T.S. GmbH: Thin Film Thermoelectric Generators, D.T.S., www.dts-generator.com/index.htm (Printed 5/4/04).
		D.T.S. GmbH: Thin Film Thermoelectric Generators, Low Power Thermoelectric Generators; www.dts-generator.com/gen.tx.html (Printed 5/4/04).
		D.T.S. GmbH: Thin Film Thermoelectric Generators, Infrared-Sensors, www.dts-generator.com/sen-txe.htm (Printed 5/4/04).
		D.T.S. GmbH: Thin Film Thermoelectric Generators, Research and development, www.dts-generator.com/dev-txe.htm (Printed 5/4/04).

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